

comply with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways supplemented to the extent applicable by State standards.

(2) Pursuant to 23 U.S.C. 109(e), where a railroad-highway grade crossing is located within the limits of or near the terminus of a Federal-aid highway project for construction of a new highway or improvement of the existing roadway, the crossing shall not be opened for unrestricted use by traffic or the project accepted by FHWA until adequate warning devices for the crossing are installed and functioning properly.

(3)(i) *Adequate warning devices*, under § 646.214(b)(2) or on any project where Federal-aid funds participate in the installation of the devices are to include automatic gates with flashing light signals when one or more of the following conditions exist:

(A) Multiple main line railroad tracks.

(B) Multiple tracks at or in the vicinity of the crossing which may be occupied by a train or locomotive so as to obscure the movement of another train approaching the crossing.

(C) High Speed train operation combined with limited sight distance at either single or multiple track crossings.

(D) A combination of high speeds and moderately high volumes of highway and railroad traffic.

(E) Either a high volume of vehicular traffic, high number of train movements, substantial numbers of schoolbuses or trucks carrying hazardous materials, unusually restricted sight distance, continuing accident occurrences, or any combination of these conditions.

(F) A diagnostic team recommends them.

(ii) In individual cases where a diagnostic team justifies that gates are not appropriate, FHWA may find that the above requirements are not applicable.

(4) For crossings where the requirements of § 646.214(b)(3) are not applicable, the type of warning device to be installed, whether the determination is made by a State regulatory agency, State highway agency, and/or the railroad, is subject to the approval of FHWA.

(c) *Grade crossing elimination*. All crossings of railroads and highways at grade shall be eliminated where there is full control of access on the highway (a freeway) regardless of the volume of railroad or highway traffic.

[40 FR 16059, Apr. 9, 1975, as amended at 47 FR 33955, Aug. 5, 1982; 62 FR 45328, Aug. 27, 1997]

§ 646.216 General procedures.

(a) *General*. Unless specifically modified herein, applicable Federal-aid procedures govern projects undertaken pursuant to this subpart.

(b) *Preliminary engineering and engineering services*. (1) As mutually agreed to by the State highway agency and railroad, and subject to the provisions of § 646.216(b)(2), preliminary engineering work on railroad-highway projects may be accomplished by one of the following methods:

(i) The State or railroad's engineering forces;

(ii) An engineering consultant selected by the State after consultation with the railroad, and with the State administering the contract; or

(iii) An engineering consultant selected by the railroad, with the approval of the State and with the railroad administering the contract.

(2) Where a railroad is not adequately staffed, Federal-aid funds may participate in the amounts paid to engineering consultants and others for required services, provided such amounts are not based on a percentage of the cost of construction, either under contracts for individual projects or under existing written continuing contracts where such work is regularly performed for the railroad in its own work under such contracts at reasonable costs.

(c) *Rights-of-way*. (1) Acquisition of right-of-way by a State highway agency on behalf of a railroad or acquisition of nonoperating real property from a railroad shall be in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. 4601 *et seq.*) and applicable FHWA right-of-way procedures in 23 CFR, chapter I, subchapter H. On projects for the elimination of hazards of railroad-highway crossings by the relocation of railroads, acquisition or replacement right-of-way by a railroad

shall be in accordance with 42 U.S.C. 4601 *et seq.*

(2) Where buildings and other depreciable structures of the railroad (such as signal towers, passenger stations, depots, and other buildings, and equipment housings) which are integral to operation of railroad traffic are wholly or partly affected by a highway project, the costs of work necessary to functionally restore such facilities are eligible for participation. However, when replacement of such facilities is necessary, credits shall be made to the cost of the project for:

(i) Accrued depreciation, which is that amount based on the ratio between the period of actual length of service and total life expectancy applied to the original cost.

(ii) Additions or improvements which provide higher quality or increased service capability of the facility and which are provided solely for the benefit of the railroad.

(iii) Actual salvage value of the material recovered from the facility being replaced. Total credits to a project shall not be required in excess of the replacement cost of the facility.

(3) Where Federal funds participate in the cost of replacement right-of-way, there will be no charge to the project for the railroad's existing right-of-way being transferred to the State highway agency except when the value of the right-of-way being taken exceeds the value of the replacement right-of-way.

(d) *State-railroad agreements.* (1) Where construction of a Federal-aid project requires use of railroad properties or adjustments to railroad facilities, there shall be an agreement in writing between the State highway agency and the railroad company.

(2) The written agreement between the State and the railroad shall, as a minimum include the following, where applicable:

(i) The provisions of this subpart and of 23 CFR part 140, subpart I, incorporated by reference.

(ii) A detailed statement of the work to be performed by each party.

(iii) Method of payment (either actual cost or lump sum),

(iv) For projects which are not for the elimination of hazards of railroad-

highway crossings, the extent to which the railroad is obligated to move or adjust its facilities at its own expense,

(v) The railroad's share of the project cost,

(vi) An itemized estimate of the cost of the work to be performed by the railroad,

(vii) Method to be used for performing the work, either by railroad forces or by contract,

(viii) Maintenance responsibility,

(ix) Form, duration, and amounts of any needed insurance,

(x) Appropriate reference to or identification of plans and specifications,

(xi) Statements defining the conditions under which the railroad will provide or require protective services during performance of the work, the type of protective services and the method of reimbursement to the railroad, and

(xii) Provisions regarding inspection of any recovered materials.

(3) On work to be performed by the railroad with its own forces and where the State highway agency and railroad agree, subject to approval by FHWA, an agreement providing for a lump sum payment in lieu of later determination of actual costs may be used for any of the following:

(i) Installation or improvement of grade crossing warning devices and/or grade crossing surfaces, regardless of cost, or

(ii) Any other eligible work where the estimated cost to the State of the proposed railroad work does not exceed \$100,000 or

(iii) Where FHWA finds that the circumstances are such that this method of developing costs would be in the best interest of the public.

(4) Where the lump sum method of payment is used, periodic reviews and analyses of the railroad's methods and cost data used to develop lump sum estimates will be made.

(5) Master agreements between a State and a railroad on an areawide or statewide basis may be used. These agreements would contain the specifications, regulations, and provisions required in conjunction with work performed on all projects. Supporting data for each project or group of projects must, when combined with the master

agreement by reference, satisfy the provisions of § 646.216(d)(2).

(6) Official orders issued by regulatory agencies will be accepted in lieu of State-railroad agreements only where, together with supplementary written understandings between the State and the railroad, they include the items required by § 646.216(d)(2).

(7) In extraordinary cases where FHWA finds that the circumstances are such that requiring such agreement or order would not be in the best interest of the public, projects may be approved for construction with the aid of Federal funds, provided satisfactory commitments have been made with respect to construction, maintenance and the railroad share of project costs.

(e) *Authorizations.* (1) The costs of preliminary engineering, right-of-way acquisition, and construction incurred after the date each phase of the work is included in an approved statewide transportation improvement program and authorized by the FHWA are eligible for Federal-aid participation. Preliminary engineering and right-of-way acquisition costs which are otherwise eligible, but incurred by a railroad prior to authorization by the FHWA, although not reimbursable, may be included as part of the railroad share of project cost where such a share is required.

(2) Prior to issuance of authorization by FHWA either to advertise the physical construction for bids or to proceed with force account construction for railroad work or for other construction affected by railroad work, the following must be accomplished:

(i) The plans, specifications and estimates must be approved by FHWA.

(ii) A proposed agreement between the State and railroad must be found satisfactory by FHWA. Before Federal funds may be used to reimburse the State for railroad costs the executed agreement must be approved by FHWA. However, cost for materials stockpiled at the project site or specifically purchased and delivered to the company for use on the project may be reimbursed on progress billings prior to the approval of the executed State-Railroad Agreement in accordance with 23 CFR 140.922(a) and § 646.218 of this part.

(iii) Adequate provisions must be made for any needed easements, right-of-way, temporary crossings for construction purposes or other property interests.

(iv) The pertinent portions of the State-railroad agreement applicable to any protective services required during performance of the work must be included in the project specifications and special provisions for any construction contract.

(3) In unusual cases, pending compliance with § 646.216(e)(2)(ii), (iii) and (iv), authorization may be given by FHWA to advertise for bids for highway construction under conditions where a railroad grants a right-of-entry to its property as necessary to prosecute the physical construction.

(f) *Construction.* (1) Construction may be accomplished by:

(i) Railroad force account,

(ii) Contracting with the lowest qualified bidder based on appropriate solicitation,

(iii) Existing continuing contracts at reasonable costs, or

(iv) Contract without competitive bidding, for minor work, at reasonable costs.

(2) Reimbursement will not be made for any increased costs due to changes in plans:

(i) For the convenience of the contractor, or

(ii) Not approved by the State and FHWA.

(3) The State and FHWA shall be afforded a reasonable opportunity to inspect materials recovered by the railroad prior to disposal by sale or scrap. This requirement will be satisfied by the railroad giving written notice, or oral notice with prompt written confirmation, to the State of the time and place where the materials will be available for inspection. The giving of notice is the responsibility of the railroad, and it may be held accountable for full value of materials disposed of without notice.

(4) In addition to normal construction costs, the following construction costs are eligible for participation with Federal-aid funds when approved by the State and FHWA:

(i) The cost of maintaining temporary facilities of a railroad company

required by and during the highway construction to the extent that such costs exceed the documented normal cost of maintaining the permanent facilities.

(ii) The cost of stage or extended construction involving grade corrections and/or slope stabilization for permanent tracks of a railroad which are required to be relocated on new grade by the highway construction. Stage or extended construction will be approved by FHWA only when documentation submitted by the State establishes the proposed method of construction to be the only practical method and that the cost of the extended construction within the period specified is estimated to be less than the cost of any practicable alternate procedure.

(iii) The cost of restoring the company's service by adjustments of existing facilities away from the project site, in lieu of and not to exceed the cost of replacing, adjusting or relocating facilities at the project site.

(iv) The cost of an addition or improvement to an existing railroad facility which is required by the highway construction.

[40 FR 16059, Apr. 9, 1975, as amended at 40 FR 29712, July 15, 1975; 47 FR 33956, Aug. 5, 1982; 62 FR 45328, Aug. 27, 1997]

§ 646.218 Simplified procedure for accelerating grade crossing improvements.

(a) The procedure set forth in this section is encouraged for use in simplifying and accelerating the processing of single or multiple grade crossing improvements.

(b) Eligible preliminary engineering costs may include those incurred in selecting crossings to be improved, determining the type of improvement for each crossing, estimating the cost and preparing the required agreement.

(c) The written agreement between a State and a railroad shall contain as a minimum:

- (1) Identification of each crossing location.
- (2) Description of improvement and estimate of cost for each crossing location.
- (3) Estimated schedule for completion of work at each location.

(d) Following programming, authorization and approval of the agreement under § 646.218(c), FHWA may authorize construction, including acquisition of warning device materials, with the condition that work at any particular location will not be undertaken until the proposed or executed State-railroad agreement under § 646.216(d)(2) is found satisfactory by FHWA and the final plans, specifications, and estimates are approved and with the condition that only material actually incorporated into the project will be eligible for Federal participation.

(e) Work programmed and authorized under this simplified procedure should include only that which can reasonably be expected to reach the construction stage within one year and be completed within two years after the initial authorization date.

§ 646.220 Alternate Federal-State procedure.

(a) On other than Interstate projects, an alternate procedure may be used, at the election of the State, for processing certain types of railroad-highway work. Under this procedure, the State highway agency will act in the relative position of FHWA for reviewing and approving projects.

(b) The scope of the State's approval authority under the alternate procedure includes all actions necessary to advance and complete the following types of railroad-highway work:

(1) All types of grade crossing improvements under § 646.206(a)(3).

(2) Minor adjustments to railroad facilities under § 646.206(b).

(c) The following types of work are to be reviewed and approved in the normal manner, as prescribed elsewhere in this subpart.

(1) All projects under § 646.206(a)(1) and (2).

(2) Major adjustments to railroad facilities under § 646.206(b).

(d) Any State wishing to adopt the alternate procedure may file a formal application for approval by FHWA. The application must include the following:

(1) The State's written policies and procedures for administering and processing Federal-aid railroad-highway work, which make adequate provisions with respect to all of the following: